

COMMONWEALTH OF VIRGINIA



JOINT COMMISSION ON TECHNOLOGY AND SCIENCE

2005 COMMISSION WORKPLAN

I. COMMISSION MEETINGS

- A. **Administrative Updates:** The Code of Virginia requires the Secretary of Technology, the Chief Information Officer of the Commonwealth, and the President of the Center for Innovative Technology to work with and/or report to JCOTS on their incentives and plans. JCOTS will be briefed by the Chief Information Officer of the Commonwealth at its first meeting of the year, and will be briefed by all three of these individuals at JCOTS' December meeting.
- B. **Current Issues:** Staff will keep abreast of technology issues emerging throughout the year on a local, state, and federal level, and will keep the members appropriately updated. Staff will also monitor activities in other states to provide perspective to issues arising in the Commonwealth.
- C. **Technology in the Commonwealth:** The members of JCOTS will have the opportunity to visit locations in the Commonwealth particularly relevant to current topics of study. Proposed trips include visits to Danville and the southwest region of the state.
- D. **Formation of Advisory Committees:** JCOTS will establish advisory committees to study issues referred to JCOTS by the General Assembly and other topics designated by JCOTS (see section II). JCOTS will receive updates as to the work of the advisory committees, and make final recommendations at the close of the 2005 Interim based on the reports of each advisory committee.
- E. **Studies to monitor:** Numerous legislative and agency studies taking place during the 2005 Interim are related to or relevant to science and technology issues. Staff will monitor the work and recommendations of these studies, and report back to the members. Studies to monitor include:

DELEGATE KENNETH C. ALEXANDER
DELEGATE JOHN A. COSGROVE
DELEGATE JOE T. MAY, CHAIR
DELEGATE SAM A. NIXON, JR.
DELEGATE KENNETH R. PLUM
DELEGATE HARRY R. PURKEY
DELEGATE THOMAS D. RUST

SENATOR JANET D. HOWELL
SENATOR STEPHEN D. NEWMAN, VICE-CHAIR
SENATOR KENNETH W. STOLLE
SENATOR WILLIAM C. WAMPLER, JR.
SENATOR JOHN WATKINS

1. HJ 6 (2004): Second year of study for a joint subcommittee created to study the Virginia Public Records Act, the State Documents Depository Program, and the effect of electronic records.
2. HJ 588 (2005): Joint subcommittee to study medical, ethical, and scientific issues relating to stem cell research conducted in the Commonwealth.
3. HJ 713 (2005): Joint subcommittee to study workforce development and training.
4. SB1107 (2005): Working group to study amendments to the Public Private Education Facilities and Infrastructure Act of 2002.
5. SJ 336 (2005): Joint subcommittee to study the operations of circuit court clerks offices.
6. SJ 361 (2005): Continues the joint subcommittee studying the needs of the manufacturing sector and the future of manufacturing in Virginia.
7. HB 1729 (2005): Computer spyware bill referred to the Crime Commission for further study.
8. HB 2672 (2005): JCOTS' recommended legislation relating to a meetings exemption for discussion of certain PPEA records, referred to the FOIA Council for further study. The FOIA Council has established a subcommittee to review the bill.
9. HB 2760 (2005): Bill to allow local public bodies to hold electronic meetings referred to the FOIA Council for further study. The FOIA Council has established a subcommittee to review the bill.

II. ADVISORY COMMITTEES

The 2005 Proposed work plan would establish four advisory committees to study a variety of current issues.

A. Integrated Government: Delegate Nixon, Delegate Plum, Senator Howell

1. Purpose: The Integrated Government (or I-Gov) Advisory Committee was established as a permanent JCOTS advisory committee in 2004. The committee was originally established because the Commonwealth, a nationally and internationally recognized leader in the development of electronic government, had evolved beyond merely digitizing the services and materials that it had always offered to re-thinking its underlying policies and processes. The phrase "integrated government" contemplates a transformation from the way government operated prior to the information age.
2. Topics for Study:
 - **Electronic toll collection.** House Joint Resolution 689 directs JCOTS to study the availability and feasibility of using electronic toll collection across the Commonwealth. Use of electronic toll systems could make toll collection more cost-effective, and could

play an integral part in the recent commitment of the Commonwealth to transportation initiatives.

- **Off-shoring & out-sourcing.** The House Committee on General Laws referred House Bill 2495 to JCOTS for further study. HB 2495 involves the performance of procurement contracts by U.S. citizens and legal aliens. This bill is closely related to discussions of off-shoring and out-sourcing initiated by the I-Gov Advisory Committee at the end of the 2004 Interim. Off-shoring in particular is becoming an increasingly relevant and controversial topic, as many jobs related to technology can increasingly be performed with ease from remote locations, often outside of the borders of the Commonwealth and the United States. Outsourcing is currently relevant in the Commonwealth as VITA discusses the possibility of outsourcing its responsibilities to a private company.
- **Electronics recycling.** In the technology age, most computers bought today are replacing existing computer systems, leading to excess computer equipment. Consideration must be given not only to the disposal of the computers themselves, but also to the sanitation of the drivers to avoid releasing potentially sensitive information to third parties. It has been suggested that the government sector should consider this issue in procuring new systems, and that contracts should include provisions for adequate sanitation. The advisory committee will consider the policy issues surrounding electronic recycling.
- **Certified e-mail.** South Carolina has adopted legislation that would allow for e-mail to be certified as a legal alternative to the United States mail for certain communications. The advisory committee will consider the practical and legal ramifications of such legislation in the Commonwealth.
- **Continued monitoring and discussion of information technology and procurement reform measures.** The I-Gov Advisory Committee established a rapport with the Virginia Information Technologies Agency in discussing procurement reform measures. It is anticipated that this dialogue would continue throughout the 2005 Interim.

B. Emerging Issues in Technology: Delegate May, Delegate Rust, Senator Newman

1. Purpose: One of the goals of JCOTS, as a policy-making body, is to identify emerging technology and science issues that will affect the Commonwealth. Often times, these issues are not yet at the forefront of the media or policy debates. The Emerging Issues Advisory Committee will seek to identify

issues that may have future implications for the Commonwealth, and discuss and identify important policy goals and initiatives in a proactive manner. The work of the advisory committee will help in bringing focus to important emerging issues.

2. Topics for Study:

- **Underground transmission lines.** As Virginia becomes increasingly urbanized, the use of underground versus overhead utility transmission lines will become a more pressing issue. The debate as to how to decide when the use of underground and overhead lines is warranted has already been seen in Northern Virginia, but the issue will undoubtedly spread to other regions of the state in the coming years. The advisory committee will seek to open a forum for discussion of this issue by gathering all relevant facts and helping to craft a statewide policy that can be used in deciding whether to use overhead or underground lines.
- **Use of soil stabilizers.** Mixing chemical additives into unpaved roadway shoulders can help stabilize the soil and reduce the incidence of low shoulders. Unpaved shoulders often erode due to traffic action and erosion, and can cause safety issues for drivers. The advisory committee will review the availability of soil stabilizers and policy issues surrounding their use.
- **Event data recorders.** The Privacy Committee began to review the use of event data recorders in cars, and access to the information recorded during the 2004 Interim. The advisory committee will continue to study the issue, specifically as it relates to access to and use of event data recorder information.
- **Use of cell phones while driving.** The House Committee on Science and Technology referred House Bill 1830 to JCOTS for further study. The bill would prohibit the use of cell phones while driving. Questions concerning the safety of using cell phones while driving have emerged in recent years concerning all drivers, and particularly concerning teen drivers. The advisory committee will study the issue by gathering and reviewing factual data concerning accident statistics in order to formulate policy recommendations.
- **Education and workforce training.** Promoting the science and technology industries in the Commonwealth has long been a goal of JCOTS. Along with increased industry and manufacturing, however, comes the need for a trained workforce. The advisory committee will review the need for increased education and

workforce training in the hard sciences and in emerging technology industries.

C. Nanotechnology: Delegate Purkey, Delegate Cosgrove, Senator Wampler

1. Purpose: Nanotechnology research and development is a fast-growing and emerging industry. The federal government has taken heed of this industry with the 21st Century Nanotechnology Research and Development Act, authorizing nearly \$3.7 billion in government funding in this field. The Commonwealth has a tradition of leadership in emerging industries, and has the opportunity to build on this reputation by becoming a leader in nanomanufacturing. This industry will have a profound impact on health care, homeland security, national defense, and infrastructure, among other things. JCOTS began the study of nanotechnology research and development opportunities in the Commonwealth last year at the direction of the General Assembly. At the final JCOTS meeting of 2004, the Commission voted to continue this important study aimed at creating a comprehensive and coordinated strategy in developing the nanotechnology industry.
2. Topics for Study:
 - **Intellectual Property Commercialization.** The Senate Committee on Education and Health referred SB 1053 to JCOTS for further study. The bill would require public institutions of higher education to establish policies concerning the assignment or transfer of intellectual property developed through externally-sponsored research. While the bill would apply to all research, this is an especially crucial issue for the development and commercialization of nanotechnology.
 - **Modeling and simulation industry.** Modeling and simulation is developing into a multi-million dollar industry, and is often associated with nanoresearch and development. The Hampton Roads area in particular has the potential to become a modeling and simulation hub. This was fueled by Governor Warner's recent Virginia Modeling and Simulation Initiative, including a \$1.4 million budget item to initiative funding. The industry has largely sprung up around defense work, but also has broad implications for commercial industries such as transportation, medicine, and manufacturing. The advisory committee will study the implications of the modeling and simulation industry, review the work currently planned for the Hampton Roads area, and make recommendations as to what JCOTS can do to further help this emerging industry.
 - **Financial aspects of nanotechnology.** The advisory committee will continue its discussions from 2004 concerning financial grant

opportunities to encourage the growth of the nanotechnology sector, and discuss what, if any, financial incentives might be developed to encourage the growth of the nanotechnology industry in the Commonwealth.

D. Privacy: Senator Watkins, Senator Stolle, Delegate Alexander

1. Purpose: Established as a permanent JCOTS Advisory Committee in 2004, the Privacy Advisory Committee reviews current privacy practices and laws as they are impacted by the increased availability of information in electronic format. Computers allow businesses and government to gather, aggregate and use information in ways not imaginable when dealing with traditional paper documents. However, this ease of use and aggregation often impacts an individual's privacy if that data is misused or not properly protected. In addition, the development of new technologies challenges the traditional balance of civil liberties and security. As technology becomes more invasive, making it possible to track a person's movement or look inside a person's home from a remote location, for example, both existing and new laws affecting privacy must be examined to ensure that the proper balance is effectuated between the ease of conducting business, security, and personal freedom.
2. Topics for Study:
 - **Database breaches.** The House Committee on Science and Technology referred House Bill 2721 to JCOTS for further study. This bill addresses an issue that has received increasing media attention -- breach of databases that contain personally identifying information. Breach of this data not only raises privacy concerns, but also fuels fears of identity theft. California has already enacted legislation similar to House Bill 2721, which would require disclosure of any security breach to those whose data was compromised. Similar legislation has been recently proposed on the federal level and in several other states. The advisory committee will review the legislation in light of the concerns and interests of all relevant stake holders. In addition, the advisory committee might consider the security of databases maintained by state agencies, and consider whether there is a need to perform regular audits to protect against security breaches.
 - **Biometrics.** During the 2004 Interim, a joint legislative subcommittee (HJ 162) studied the potential use of biometrics on driver's licenses. The study made no recommendations, other than that the issue needed further review. The Department of Motor Vehicles requested that the General Assembly facilitate further

study, but such a study was not adopted. The advisory committee will receive a demonstration as to the technology relating to biometrics on identification cards. The advisory committee will also establish and maintain an open dialogue with the Department of Motor Vehicles concerning their review of biometrics, its potential use on driver's licenses, and the privacy concerns associated with the use of biometrics.

- **Social Security Numbers.** The advisory committee will be briefed on the current state of the law in Virginia concerning access to social security numbers and protection of the disclosure of social security numbers. The advisory committee may discuss what, if any, action is needed to further protect these identifiers.
- **Online Dating.** The advisory committee will review House Bill 2467 (2005), relating to online dating safety. The bill would have required an online dating service to conduct a criminal background checks on its members or make specific disclosures or warnings.